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INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

to make Indiana a cleaner, healthier place to live.

100 North Senate Avenue
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6015

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NEW CONSTRUCTION AND FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) OFFICE OF AIR QUALITY

**Hoosier Hills Paving By James & Sons, Inc.
Rural Route 4
Bloomfield, Indiana 47424**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: F055-15634-00038	
Issued by: original signed by Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: Expiration Date:

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SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-8-3(b)]

The Permittee owns and operates a hot-mix asphalt plant.

Authorized individual:	Mr. Marty James, Vice President
Source Address:	Rural Route 4, Bloomfield, Indiana 47424
Mailing Address:	Rural Route 4, Box 545, Bloomfield, Indiana 47624
SIC Code:	2951
Source Location Status:	Greene
County Status:	Attainment for all criteria pollutants
Source Status:	Federally Enforceable State Operating Permit (FESOP) Minor Source under PSD; Minor Source under Section 112 of the Clean Air Act Not 1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

This stationary source consists of the following emission units and pollution control devices:

One (1) batch hot-mix asphalt plant, with a maximum throughput capacity of 120 tons per hour, consisting of the following emission units:

- (a) Two (2) natural gas-fired oil heaters (identified as H-1 and H-2), each having a maximum heat input capacity of 0.852 MMBtu per hour. Both heaters use No. 2 fuel oil with a maximum sulfur content of 0.5% by weight as an alternate fuel.
- (b) One (1) natural gas-fired rotary dryer having a maximum heat input capacity of 66 MMBtu per hour and a maximum throughput capacity of 120 tons per hour. Particulate matter emissions are controlled by a cyclone and baghouse (identified as BH-01), exhausting at stack S-1.
- (c) One (1) batching tower pug mill with a maximum throughput capacity of 120 tons per hour. Emissions of particulate matter are controlled by a cyclone and baghouse (identified as BH-01), exhausting at stack S-1.
- (d) One (1) hot mix asphalt truck loading facility with a maximum capacity of 120 tons of product per hour.
- (e) One (1) aggregate storage area consisting of uncovered storage piles of sand and gravel.
- (f) Four (4) cold feed bins each with a maximum capacity of 20 tons, connected to one (1) screen with material transferred using mechanical conveyors.

- (g) Material handling and screening equipment capable of handling 120 tons of aggregate per hour and consisting of mechanical conveyors, elevators, screens, and mixers.
- (h) Two (2) asphalt cement tanks (identified as T-1 and T-2) with a maximum capacities of 16,050 gallons and 26,510 gallons, respectively.

A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(I)]

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) Equipment powered by internal combustion engines of capacity equal to or less than 0.5 MMBtu per hour.
- (b) A gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling tanks, locomotives, automobiles, having a storage capacity less than or equal to 10,500 gallons.
- (c) A petroleum fuel, other than gasoline, dispensing facility, having a storage capacity of less than or equal to 10,500 gallons, and dispensing less than 230,000 gallons per month.
- (d) Vessels storing lubricating oils, hydraulics oils, machining oils, and machining fluids.
- (e) Packaging lubricants and greases.
- (f) Filling drums, pails, or other packaging containers with lubricating oils, waxes, and greases.
- (g) Application of oils, greases, lubricants or other nonvolatile materials applied as temporary protective coatings.
- (h) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, and welding equipment.
- (i) Replacement or repair of electrostatic precipitators, bags in baghouses, and filters in other air filtration equipment.
- (j) Heat exchanger cleaning and repair.
- (k) Paved roads and parking lots with limited public access.

A.4 FESOP Applicability [326 IAC 2-8-2]

This stationary source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) for a Federally Enforceable State Operating Permit (FESOP).

A.5 Prior Permits Superseded [326 IAC 2-1.1-9.5]

- (a) All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either
 - (1) incorporated as originally stated,
 - (2) revised, or

(3) deleted

by this permit.

(b) All previous registrations and permits are superseded by this permit.

SECTION B GENERAL CONDITIONS

B.1 Permit No Defense [IC 13]

Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a FESOP under 326 IAC 2-8.

B.2 Definitions [326 IAC 2-8-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2, and 326 IAC 2-7) shall prevail.

B.3 Permit Term [326 IAC 2-8-4(2)]

This permit is issued for a fixed term of five (5) years from the original date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date.

B.4 Enforceability [326 IAC 2-8-6]

Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

B.5 Termination of Right to Operate [326 IAC 2-8-9] [326 IAC 2-8-3(h)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-8-3(h) and 326 IAC 2-8-9.

B.6 Severability [326 IAC 2-8-4(4)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.7 Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]

This permit does not convey any property rights of any sort, or any exclusive privilege.

B.8 Duty to Supplement and Provide Information [326 IAC 2-8-3(f)] [326 IAC 2-8-4(5)(E)] [326 IAC 2-8-5(a)(4)]

- (a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this

permit. The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1). Upon request, the Permittee shall also furnish to IDEM, OAQ, copies of records required to be kept by this permit or, for information claimed to be confidential, the Permittee may furnish such records directly to the U. S. EPA along with a claim of confidentiality.[326 IAC 2-8-4(5)(E)]

- (c) The Permittee may include a claim of confidentiality in accordance with 326 IAC 17. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.9 Compliance Order Issuance [326 IAC 2-8-5(b)]

IDEM, OAQ may issue a compliance order to this Permittee upon discovery that this permit is in nonconformance with an applicable requirement. The order may require immediate compliance or contain a schedule for expeditious compliance with the applicable requirement.

B.10 Compliance with Permit Conditions [326 IAC 2-8-4(5)(A)] [326 IAC 2-8-4(5)(B)]

- (a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for:
 - (1) Enforcement action;
 - (2) Permit termination, revocation and reissuance, or modification; and
 - (3) Denial of a permit renewal application.
- (b) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- (c) An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in condition B, Emergency Provisions.

B.11 Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)] [326 IAC 2-8-5(1)]

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by an authorized individual of truth, accuracy, and completeness. This certification, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.
- (c) An authorized individual is defined at 326 IAC 2-1.1-1(1).

B.12 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]

- (a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent certifications shall cover the time period from January 1 to

December 31 of the previous year, and shall be submitted in letter form no later than July 1 of each year to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
 - (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
 - (2) The compliance status;
 - (3) Whether compliance was continuous or intermittent;
 - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-8-4(3); and
 - (5) Such other facts as specified in Sections D of this permit, IDEM, OAQ, may require to determine the compliance status of the source.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

B.13 Preventive Maintenance Plan [326 IAC 1-6-3] [326 IAC 2-8-4(9)] [326 IAC 2-8-5(a)(1)]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within sixty (60) days after issuance of this permit, including the following information on each facility:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional sixty (60) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality

100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

The PMP and the PMP extension notification do not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The Permittee shall implement the PMPs as necessary to ensure that failure to implement a PMP does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or contributes to any violation. The PMP does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (d) Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

B.14 Emergency Provisions [326 IAC 2-8-12]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-8-12.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describes the following:
 - (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
 - (2) The permitted facility was at the time being properly operated;
 - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
 - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone No.: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section)
or,
Telephone No.: 317-233-5674 (ask for Compliance Section)
Facsimile No.: 317-233-5967

Failure to notify IDEM, OAQ, by telephone or facsimile within four (4) daytime business hours after the beginning of the emergency, or after the emergency is discovered or reasonably should have been discovered, shall constitute a violation of 326 IAC 2-8 and any other applicable rules. [326 IAC 2-8-12(f)]

- (5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-8-4(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-8-3(c)(6) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-8 and any other applicable rules.
- (g) Operations may continue during an emergency only if the following conditions are met:
 - (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

- (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
 - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
 - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.

Any operations shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]

- (a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provision), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.
- (c) Emergencies shall be included in the Quarterly Deviation and Compliance Monitoring Report.

**B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination
[326 IAC 2-8-4(5)(C)] [326 IAC 2-8-7(a)] [326 IAC 2-8-8]**

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a FESOP modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit [326 IAC 2-8-4(5)(C)]. The notification by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:
 - (1) That this permit contains a material mistake.

- (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
 - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement [326 IAC 2-8-8(a)].
- (c) Proceedings by IDEM, OAQ, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-8-8(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-8-8(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ, may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]

B.17 Permit Renewal [326 IAC 2-8-3(h)]

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-8-3. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, IN 46206-6015

- (b) Timely Submittal of Permit Renewal [326 IAC 2-8-3]
 - (1) A timely renewal application is one that is:
 - (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
 - (B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
 - (2) If IDEM, OAQ upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied.
- (c) Right to Operate After Application for Renewal [326 IAC 2-8-9]

If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-8 until IDEM, OAQ takes

final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ, any additional information identified as needed to process the application.

B.18 Permit Amendment or Revision [326 IAC 2-8-10] [326 IAC 2-8-11.1]

- (a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 whenever the Permittee seeks to amend or modify this permit.

- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application should be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (c) The Permittee may implement the administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.19 Operational Flexibility [326 IAC 2-8-15]

- (a) The Permittee may make any change or changes at this source that are described in 326 IAC 2-8-15(b) through (d), without prior permit revision, if each of the following conditions is met:

- (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
- (2) Any approval required by 326 IAC 2-8-11.1 has been obtained;
- (3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
- (4) The Permittee notifies the:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

- (5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-8-15(b) through (d) and makes such records available, upon reasonable request, to public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ, in the notices specified in 326 IAC 2-8-15(b), (c)(1), and (d).

- (b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-8-15(a) and the following additional conditions:

- (1) A brief description of the change within the source;
- (2) The date on which the change will occur;
- (3) Any change in emissions; and
- (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted by the Permittee does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

- (c) Emission Trades [326 IAC 2-8-15(c)]
The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-8-15(c).
- (d) Alternative Operating Scenarios [326 IAC 2-8-15(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-8-4(7). No prior notification of IDEM, OAQ or U.S. EPA is required.

B.20 Permit Revision Requirement [326 IAC 2-8-11.1]

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-8-11.1.

B.21 Inspection and Entry [326 IAC 2-8-5(a)(2)] [IC 13-14-2-2]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a FESOP source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.22 Transfer of Ownership or Operational Control [326 IAC 2-8-10]

- (a) The Permittee must comply with the requirements of 326 IAC 2-8-10 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The application which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-11(b)(3)]

B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-8-4(6)] [326 IAC 2-8-16]

- (a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.
- (b) Failure to pay may result in administrative enforcement action, or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-0425 (ask for OAQ, Technical Support and Modeling Section), to determine the appropriate permit fee.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

Emissions Limitations and Standards [326 IAC 2-8-4(1)]

C.1 Overall Source Limit [326 IAC 2-8] [326 IAC 2-2]

The purpose of this permit is to limit this source's potential to emit to less than major source levels for the purpose of Section 502(a) of the Clean Air Act.

(a) Pursuant to 326 IAC 2-8:

- (1) The potential to emit any regulated pollutant, except particulate matter (PM), from the entire source shall be limited to less than one-hundred (100) tons per twelve (12) consecutive month period. This limitation shall make the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable;
- (2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and
- (3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.

(b) Pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)), potential to emit particulate matter (PM) from the entire source shall be limited to less than two hundred fifty (250) tons per twelve (12) consecutive month period. This limitation shall make the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable;

(c) This condition shall include all emission points at this source including those that are insignificant as defined in 326 IAC 2-7-1(21). The source shall be allowed to add insignificant activities not already listed in this permit, provided that the source's potential to emit does not exceed the above specified limits.

(d) Section D of this permit contains independently enforceable provisions to satisfy this requirement.

C.2 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1.

C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2(3)]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and in 326 IAC 9-1-2.

C.5 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

C.6 Fugitive Particulate Matter Emission Limitations [326 IAC 6-5]

Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), fugitive particulate matter emissions shall be controlled according to the plan submitted on May 15, 2002. The plan is included as Attachment A.

C.7 Operation of Equipment [326 IAC 2-8-5(a)(4)]

Except as otherwise provided by statute, rule or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

C.8 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted.

C.9 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
 - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
 - (2) If there is a change in the following:
 - (A) Asbestos removal or demolition start date;
 - (B) Removal or demolition contractor; or
 - (C) Waste disposal site.

- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (e) **Procedures for Asbestos Emission Control**
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-4 emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) **Indiana Accredited Asbestos Inspector**
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement that the inspector be accredited is federally enforceable.

Testing Requirements [326 IAC 2-8-4(3)]

C.10 Performance Testing [326 IAC 3-6]

- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.11 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

C.12 Compliance Monitoring [326 IAC 2-8-4(3)] [326 IAC 2-8-5(a)(1)]

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within thirty (30) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within thirty (30) days, the Permittee may extend the compliance schedule related to the equipment for an additional thirty (30) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

in writing, prior to the end of the initial thirty (30) day compliance schedule with full justification of the reasons for inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Unless otherwise specified in the approval for the new emissions unit, compliance monitoring for new emission units or emission units added through a permit revision shall be implemented when operation begins.

C.13 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63 or other approved methods as specified in this permit.

C.14 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-8-4(3)] [326 IAC 2-8-5(1)]

- (a) Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the

expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent ($\pm 2\%$) of full scale reading.

- (b) The Permittee may request the IDEM, OAQ approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other parameters.

Corrective Actions and Response Steps [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

C.15 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68.215]

If a regulated substance, subject to 40 CFR 68, is present at a source in more than a threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall submit:

- (a) A compliance schedule for meeting the requirements of 40 CFR 68; or
- (b) As a part of the annual compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP); and

All documents submitted pursuant to this condition shall include the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

C.16 Compliance Response Plan - Preparation, Implementation, Records, and Reports [326 IAC 2-8-4] [326 IAC 2-8-5]

- (a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. A CRP shall be submitted to IDEM, OAQ upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and is comprised of:
 - (1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected timeframe for taking reasonable response steps.
 - (2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan to include such response steps taken.
- (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:
 - (1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan; or
 - (2) If none of the reasonable response steps listed in the Compliance Response Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such

additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.

- (3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, the IDEM, OAQ shall be promptly notified of the expected date of the shut down, the status of the applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.
 - (4) Failure to take reasonable response steps shall constitute a violation of the permit.
- (c) The Permittee is not required to take any further response steps for any of the following reasons:
- (1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.
 - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied.
 - (3) An automatic measurement was taken when the process was not operating.
 - (4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.
- (d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.
- (e) The Permittee shall record all instances when response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
- (f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

C.17 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4]
[326 IAC 2-8-5]

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM,

OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.

- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The documents submitted pursuant to this condition do require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

C.18 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]

- (a) Records of all required data, reports and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.19 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]

- (a) The source shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015
- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (d) Unless otherwise specified in this permit, any quarterly report required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. The report does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (e) The first report covered the period commencing on the date of issuance of the original FESOP and ended on the last day of the reporting period. All subsequent reporting periods shall be based on calendar years.

Stratospheric Ozone Protection

C.20 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

- (a) Persons opening appliances for maintenance, service, repair or disposal must comply with the required practices pursuant to 40 CFR 82.156
- (b) Equipment used during the maintenance, service, repair or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- (c) Persons performing maintenance, service, repair or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

SECTION D.1

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

One (1) batch hot-mix asphalt plant, with a maximum throughput capacity of 120 tons per hour, consisting of the following emission units:

- (a) Two (2) natural gas-fired oil heaters (identified as H-1 and H-2), each having a maximum heat input capacity of 0.852 MMBtu per hour. Both heaters use No. 2 fuel oil with a maximum sulfur content of 0.5% by weight as an alternate fuel.
- (b) One (1) natural gas-fired rotary dryer having a maximum heat input capacity of 66 MMBtu per hour and a maximum throughput capacity of 120 tons per hour. Particulate matter emissions are controlled by a cyclone and baghouse (identified as BH-01), exhausting at stack S-1.
- (c) One (1) batching tower pug mill with a maximum throughput capacity of 120 tons per hour. Emissions of particulate matter are controlled by a cyclone and baghouse (identified as BH-01), exhausting at stack S-1.
- (d) One (1) hot mix asphalt truck loading facility with a maximum capacity of 120 tons of product per hour.
- (e) One (1) aggregate storage area consisting of uncovered storage piles of sand and gravel.
- (f) Four (4) cold feed bins each with a maximum capacity of 20 tons, connected to one (1) screen with material transferred using mechanical conveyors.
- (g) Material handling and screening equipment capable of handling 120 tons of aggregate per hour and consisting of mechanical conveyors, elevators, screens, and mixers.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Construction Conditions

General Construction Conditions

- D.1.1 This permit to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.
- D.1.2 Pursuant to IC 13-15-5-3, this section of this permit becomes effective upon its issuance.
- D.1.3 All requirements of these construction conditions shall remain in effect unless modified in a manner consistent with procedures established for revisions pursuant to 326 IAC 2.
- D.1.4 The attached affidavit of construction shall be submitted to the Office of Air Quality (OAQ), Permit Administration and Development Section, verifying that the emission units were constructed as proposed in the application.

Operation Conditions

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.1.5 Particulate Matter [40 CFR 60, Subpart I][40 CFR 60, Subpart A] [326 IAC 2-2] [40 CFR 52.21]

- (a) Pursuant to the New Source Performance Standards, 326 IAC 12 (40 CFR 60.90 to 60.93, Subpart I):

- (1) Particulate matter emissions from the asphalt plant shall not exceed 0.04 grains per dry standard cubic foot (gr/dscf), and
- (2) The visible emissions from the plant shall not exceed 20 percent opacity.

This emission limitation is equivalent to 13.3 pounds per hour (58.25 tons per year) based on an exhaust rate of 38,880 acfm and an exhaust temperature of 300 degrees Fahrenheit.

These conditions also make 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 for PM not applicable.

- (b) Except when otherwise specified in 40 CFR 60, Subpart I, the Permittee shall comply with the provisions of 40 CFR 60, Subpart A, General Provisions.

D.1.6 FESOP Limitations [326 IAC 2-8][326 IAC 2-2][40 CFR 52.21]

- (a) The PM_{10} emissions from the aggregate dryer and mixer are limited to 0.027 pounds of PM_{10} per ton of asphalt produced. This is equivalent to PM_{10} emissions of less than 14.2 tons per twelve (12) consecutive month period. The PM_{10} emissions for the entire source are therefore limited to less than 14.6 tons per twelve (12) consecutive month period.
- (b) Pursuant to 326 IAC 2-8-4, the VOC emissions from cold mix asphalt production shall not exceed 98 tons per twelve (12) consecutive month period with compliance determined at the end of each month. To comply with this VOC limitation, the liquid binder used in cold mix asphalt production shall be limited as follows:
- (1) Cutback asphalt rapid cure liquid binder usage shall not exceed 103 tons of VOC solvent per twelve (12) consecutive month period rolled on a monthly basis.
 - (2) Cutback asphalt medium cure liquid binder usage shall not exceed 140 tons of VOC solvent per twelve (12) consecutive month period rolled on a monthly basis.
 - (3) Cutback asphalt slow cure liquid binder usage shall not exceed 392 tons of VOC solvent per twelve (12) consecutive month period rolled on a monthly basis.
 - (4) Emulsified asphalt with solvent liquid binder usage shall not exceed 211 tons of VOC solvent per twelve (12) consecutive month period rolled on a monthly basis.
 - (5) Other asphalt with solvent liquid binder shall not exceed 3,920 tons of VOC solvent per twelve (12) consecutive month period rolled on a monthly basis.

- (6) The VOC solvent allotments in (1) through (5) above shall be adjusted when more than one type of binder is used per twelve (12) month consecutive period rolled on a monthly basis. In order to determine the tons of VOC emitted per each type of binder, use the following formula and divide the tons of VOC solvent used for each type of binder by the corresponding adjustment ratio listed in the table that follows.

$$\frac{\text{Tons of solvent contained in binder}}{\text{Adjustment ratio}} = \text{tons of VOC emitted}$$

Type of binder	Tons VOC Solvent	Adjustment Ratio	Tons VOC Emitted
Cutback Asphalt Rapid Cure		1	
Cutback Asphalt Medium Cure		1.36	
Cutback Asphalt Slow Cure		3.8	
Emulsified Asphalt		2.04	
Other Asphalt		38	

The equivalent total tons of VOC of the combined liquid binders shall be less than 97.8 tons per twelve consecutive month period rolled on a monthly basis.

- (7) Liquid binders used in the production of cold mix asphalt shall be defined as follows:
- (A) Cut back asphalt rapid cure, containing a maximum of 25.3% of the liquid binder by weight of VOC solvent and 95% by weight of VOC solvent evaporating.
 - (B) Cut back asphalt medium cure, containing a maximum of 28.6% of the liquid binder by weight of VOC solvent and 70% by weight of VOC solvent evaporating.
 - (C) Cut back asphalt slow cure, containing a maximum of 20% of the liquid binder by weight of VOC solvent and 25% by weight of VOC solvent evaporating.
 - (D) Emulsified asphalt with solvent, containing a maximum of 15% of liquid binder by weight of VOC solvent and 46.4% by weight of the VOC solvent in the liquid blend evaporating. The percent oil distillate in emulsified asphalt with solvent liquid, as determined by ASTM, must be 7% or less of the total emulsion by volume
 - (E) Other asphalt with solvent binder, containing a maximum 25.9% of the liquid binder of VOC solvent and 2.5% by weight of the VOC solvent evaporating.

- (7) Liquid binders used in the production of cold mix asphalt shall be defined as follows:
- (A) Cut back asphalt rapid cure, containing a maximum of 25.3% of the liquid binder by weight of VOC solvent and 95% by weight of VOC solvent evaporating.
 - (B) Cut back asphalt medium cure, containing a maximum of 28.6% of the liquid binder by weight of VOC solvent and 70% by weight of VOC solvent evaporating.
 - (C) Cut back asphalt slow cure, containing a maximum of 20% of the liquid binder by weight of VOC solvent and 25% by weight of VOC solvent evaporating.
 - (D) Emulsified asphalt with solvent, containing a maximum of 15% of liquid binder by weight of VOC solvent and 46.4% by weight of the VOC solvent in the liquid blend evaporating. The percent oil distillate in emulsified asphalt with solvent liquid, as determined by ASTM, must be 7% or less of the total emulsion by volume
 - (E) Other asphalt with solvent binder, containing a maximum 25.9% of the liquid binder of VOC solvent and 2.5% by weight of the VOC solvent evaporating.

Compliance with these PM₁₀ and VOC limits makes the provisions of 326 IAC 2-7 and 326 IAC 2-2 (40 CFR 52.21) not applicable to this source.

D.1.7 Miscellaneous Operations: Asphalt Paving [326 IAC 8-5-2]

Pursuant to 326 IAC 8-5-2 (Miscellaneous Operations: Asphalt Paving), no person shall cause or allow the use of cutback asphalt or asphalt emulsion containing more than 7 percent oil distillate by volume of emulsion for any paving application except:

- (a) penetrating prime coating;
- (b) stockpile storage; and
- (c) application during the months of November, December, January, February, and March.

D.1.8 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

Compliance Determination Requirements

D.1.9 Particulate Matter

In order to comply with Conditions D.1.5 and D.1.6(a), the baghouse (identified as BH-01) for PM and PM₁₀ control shall be in operation at all times when the rotary dryer is in operation.

D.1.10 Testing Requirements [326 IAC 2-8-4(3)] [40 CFR 60, Subpart I]

To document compliance with Conditions D.1.5 and D.1.6(a), the Permittee shall perform PM and PM-10 testing within 60 days of achieving the maximum production rate, but not later than 180

days after initial startup. These tests shall be performed using methods as approved by the Commissioner. PM-10 includes filterable and condensible PM-10.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

D.1.11 Visible Emissions Notations

- (a) Visible emission notations of the rotary dryer stack exhaust (identified as S-1) shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

D.1.12 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the dryer at least once per shift when the aggregate dryer/mixer is in operation when venting to the atmosphere. When for any one reading, the pressure drop across the baghouse is outside the normal range of 2.0 and 4.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan-Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.1.13 Baghouse Inspections

An inspection shall be performed each calendar quarter of all bags controlling the dryer when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting indoors. All defective bags shall be replaced.

D.1.14 Broken or Failed Bag Detection

In the event that bag failure has been observed:

- (a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there

are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirement [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.1.15 Record Keeping Requirements

- (a) To document compliance with Condition D.1.6(b), the Permittee shall maintain the following records to document VOC usage:

- (1) Amount and type of liquid binder used in the production of cold mix asphalt each month.
- (2) Type and VOC content by weight of the liquid binder used in the production of cold mix asphalt each month.
- (3) Amount of VOC used in the production of cold mix asphalt each month.

Records may include: delivery tickets, manufacturer's data, material safety data sheets (MSDS), and other documents necessary to verify the type and amount used. Test results of ASTM tests for asphalt cutback and asphalt emulsion may be used to document volatilization.

- (b) To document compliance with Condition D.1.11, the Permittee shall maintain records of visible emission notations of the dryer stack exhaust (identified as stack S-1).
- (c) To document compliance with Condition D.1.12, the Permittee shall maintain once per shift records of the following operational parameters during normal operation when venting to the atmosphere:
 - (1) Inlet and outlet differential static pressure; and
 - (2) Cleaning cycle operation.
- (d) To document compliance with Condition D.1.13, the Permittee shall maintain records of the results of the inspections required under Condition D.1.13.
- (e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.16 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.6(b) shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting form located at the end of this permit, or its equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

SECTION D.2

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

- (h) Two (2) asphalt cement tanks (identified as T-1 and T-2) with a maximum capacities of 16,050 gallons and 26,510 gallons, respectively.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Construction Conditions

General Construction Conditions

- D.2.1 This permit to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.
- D.2.2 Pursuant to IC 13-15-5-3, this section of this permit becomes effective upon its issuance.
- D.2.3 All requirements of these construction conditions shall remain in effect unless modified in a manner consistent with procedures established for revisions pursuant to 326 IAC 2.
- D.2.4 The attached affidavit of construction shall be submitted to the Office of Air Quality (OAQ), Permit Administration and Development Section, verifying that the emission units were constructed as proposed in the application.

Operation Conditions

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.2.5 Volatile Organic Compound Storage Vessels [40 CFR 60, Subpart Kb]

- (a) The asphalt cement tanks are subject to 40 CFR 60, Subpart Kb because the maximum capacity of each tank is greater than 40m³, the tanks are used to store volatile organic liquids (including petroleum), and construction, reconstruction, or modification of the tanks commenced after July 23, 1984.

Pursuant to 40 CFR 60, Subpart Kb, the Permittee shall maintain records as required by Condition D.2.6.

- (b) Tank T-1 is exempt from the General Provisions (Part 60, Subpart A) and from all other provisions of this subpart, except those listed in Condition D.2.6, because it has a maximum capacity less than 75m³ (19,817 gallons).
- (c) Tank T-2 is exempt from the General Provisions (Part 60, Subpart A) and from all other provisions of this subpart because it has a maximum capacity less than 151m³ (39,898 gallons) and is used to store liquids with a maximum true vapor pressure less than 15.0 KPa (2.16 psi).

Record Keeping and Reporting Requirement [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.2.6 Record Keeping Requirements

Pursuant to 40 CFR 60, Subpart Kb (326 IAC 12), the Permittee shall maintain records of the dimensions of the storage tanks and an analysis showing the capacity of the storage tanks. These records shall be maintained for the life of the source.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
CERTIFICATION**

Source Name: Hoosier Hills Paving By James & Sons, Inc.
Source Address: Rural Route 4, Bloomfield, Indiana 47424
Mailing Address: Rural Route 4, Box 545, Bloomfield, Indiana 47424
FESOP No.: F055-15634-00038

**This certification shall be included when submitting monitoring, testing reports/results
or other documents as required by this permit.**

Please check what document is being certified:

- 9 Annual Compliance Certification Letter
- 9 Test Result (specify) _____
- 9 Report (specify) _____
- 9 Notification (specify) _____
- 9 Affidavit (specify) _____
- 9 Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH
P.O. Box 6015
100 North Senate Avenue
Indianapolis, Indiana 46206-6015
Phone: 317-233-5674
Fax: 317-233-5967**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
EMERGENCY OCCURRENCE REPORT**

Source Name: Hoosier Hills Paving By James & Sons, Inc.
Source Address: Rural Route 4, Bloomfield, Indiana 47424
Mailing Address: Rural Route 4, Box 545, Bloomfield, Indiana 47424
FESOP No.: F055-15634-00038

This form consists of 2 pages

Page 1 of 2

9 This is an emergency as defined in 326 IAC 2-7-1(12)
CThe Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and
CThe Permittee must submit notice in writing or by facsimile within two (2) days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:

Control Equipment:

Permit Condition or Operation Limitation in Permit:

Description of the Emergency:

Describe the cause of the Emergency:

If any of the following are not applicable, mark N/A

Page 2 of 2

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO ₂ , VOC, NO _x , CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: _____
Title / Position: _____
Date: _____
Phone: _____

A certification is not required for this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT**

Source Name: Hoosier Hills Paving By James & Sons, Inc.
Source Address: Rural Route 4, Bloomfield, Indiana 47424
Mailing Address: Rural Route 4, Box 545, Bloomfield, Indiana 47424
FESOP No.: F055-15634-00038

Months: _____ to _____ Year: _____

Page 1 of 2

This report is an affirmation that the source has met all the requirements stated in this permit. This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

9 NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

9 THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

Permit Requirement (specify permit condition #)

Date of Deviation:

Duration of Deviation:

Number of Deviations:

Probable Cause of Deviation:

Response Steps Taken:

Permit Requirement (specify permit condition #)

Date of Deviation:

Duration of Deviation:

Number of Deviations:

Probable Cause of Deviation:

Response Steps Taken:

Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Form Completed By: _____

Title/Position: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Single Liquid Binder Solvent Quarterly Report

Source Name: Hoosier Hills Paving By James & Sons, Inc.
Initial Source Address: Rural Route 4, Bloomfield, Indiana 47424
Mailing Address: Rural Route 4, Box 545, Bloomfield, Indiana 47424
FESOP No.: F055-15634-00038
Facility: Asphalt Plant
Parameter: VOC Solvent
Limit: Cutback asphalt rapid cure liquid binder usage shall not exceed 103 tons of VOC solvent per twelve (12) consecutive month period rolled on a monthly basis.
Cutback asphalt medium cure liquid binder usage shall not exceed 140 tons of VOC solvent per twelve (12) consecutive month period rolled on a monthly basis.
Cutback asphalt slow cure liquid binder usage shall not exceed 392 tons of VOC solvent per twelve (12) consecutive month period rolled on a monthly basis.
Emulsified asphalt with solvent liquid binder usage shall not exceed 211 tons of VOC solvent per twelve (12) consecutive month period rolled on a monthly basis.
Other asphalt with solvent liquid binder shall not exceed 3,920 tons of VOC solvent per twelve (12) consecutive month period rolled on a monthly basis.

YEAR: _____

The following liquid binder solvent was the only liquid binder solvent used over the previous 12 month period:_____ Limit applicable:_____

(use of more than one binder requires the use of the "Multiple Liquid Binder Solvents" report form)

Month	Column 1	Column 2	Column 1 + Column 2
	This Month (tons)	Previous 11 Months (tons)	12 Month Total (tons)
Month 1			
Month 2			
Month 3			

- 9 No deviation occurred in this reporting period.
9 Deviation/s occurred in this reporting period.

Deviation has been reported on: _____

Submitted by: _____

Date: _____

Title / Position: _____

Signature: _____

Phone: _____

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF AIR QUALITY
 COMPLIANCE DATA SECTION**

Multiple Liquid Binder Solvent Quarterly Report

Source Name: Hoosier Hills Paving By James & Sons, Inc.
 Source Address: Rural Route 4, Bloomfield, Indiana 47424
 Mailing Address: Rural Route 4, Box 545, Bloomfield, Indiana 47424
 FESOP No.: F055-15634-00038
 Facility: Asphalt Plant
 Parameter: VOC
 Limit: 98.0 tons per year
 Year:

Month	Type of Liquid binder	Solvent Usage This Month (tons)	Divisor	VOC emitted This Month (tons) for each solvent	VOC emitted This Month (tons)	VOC emitted Previous 11 Months (tons)	This month + Previous 11months =VOC emitted 12 Month Total (tons)
Month 1	Cutback asphalt rapid cure		1				
	Cutback asphalt medium cure		1.36				
	Cutback asphalt slow cure		3.8				
	Emulsified asphalt		2.04				
	other asphalt		38				
Month 2	Cutback asphalt rapid cure		1				
	Cutback asphalt medium cure		1.36				
	Cutback asphalt slow cure		3.8				
	Emulsified asphalt		2.04				
	other asphalt		38				
Month 3	Cutback asphalt rapid cure		1				
	Cutback asphalt medium cure		1.36				
	Cutback asphalt slow cure		3.8				
	Emulsified asphalt		2.04				
	other asphalt		38				

9 No deviation occurred in this reporting period.
 9 Deviation/s occurred in this reporting period.
 Deviation has been reported on: _____

Submitted by: _____ Date: _____
 Title / Position: _____ Phone: _____
 Signature: _____

Attach a signed certification to complete this report.

Attachment A

Fugitive Particulate Matter Emissions Control Plan

Fugitive PM Control Plan For Hoosier Hills Paving By James & Sons, Inc.

(Submitted May 15, 2002)

Fugitive particulate matter emissions from plant roadways, parking lots, material handling/conveying, and storage piles shall be controlled by:

- (a) Paving all roadways, parking lots, and stockpile storage areas.
- (b) Applying a dust suppressant, such as water, to road surfaces and stockpiles when needed.

August 27, 2002

**Indiana Department of Environmental Management
Office of Air Quality**

**Addendum to the Technical Support Document (TSD) for
a Federally Enforceable State Operating Permit (FESOP)**

Source Background and Description

Source Name: Hoosier Hills Paving By James & Sons, Inc.
Source Location: Rural Route 4, Bloomfield, Indiana 47424
County: Greene
SIC Code: 2951
Operation Permit No.: F055-15634-00038
Permit Reviewer: ERG/AB

On July 4, 2002, the Office of Air Quality (OAQ) had a notice published in the Linton Daily Citizen, Linton, Indiana, stating that Hoosier Hills Paving by James & Sons, Inc., had applied for a Federally Enforceable State Operating Permit (FESOP) to operate an asphalt manufacturing plant with control. The notice also stated that OAQ proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On July 29, 2002, Hoosier Hills Paving by James & Sons, Inc., submitted comments on the proposed FESOP. The summary of the comments is as follows:

Comment 1:

In sections A and D.1 of the permit, the word "hour" was omitted from the description of the asphalt dryer.

Response to Comment 1:

IDEM, OAQ has made the following correction to Condition A.2 and Section D.1.

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

This stationary source consists of the following emission units and pollution control devices:

One (1) batch hot-mix asphalt plant, with a maximum throughput capacity of 120 tons per hour, consisting of the following emission units:

- (b) One (1) natural gas-fired rotary dryer having a maximum heat input capacity of 66 MMBtu per **hour** and a maximum throughput capacity of 120 tons per hour. Particulate matter emissions are controlled by a cyclone and baghouse (identified as BH-01), exhausting at stack S-1.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

One (1) batch hot-mix asphalt plant, with a maximum throughput capacity of 120 tons per hour, consisting of the following emission units:

- (a) Two (2) natural gas-fired oil heaters (identified as H-1 and H-2), each having a maximum heat input capacity of 0.852 MMBtu per hour. Both heaters use No. 2 fuel oil with a maximum sulfur content of 0.5% by weight as an alternate fuel.
- (b) One (1) natural gas-fired rotary dryer having a maximum heat input capacity of 66 MMBtu per hour and a maximum throughput capacity of 120 tons per hour. Particulate matter emissions are controlled by a cyclone and baghouse (identified as BH-01), exhausting at stack S-1.
- (c) One (1) batching tower pug mill with a maximum throughput capacity of 120 tons per hour. Emissions of particulate matter are controlled by a cyclone and baghouse (identified as BH-01), exhausting at stack S-1.
- (d) One (1) hot mix asphalt truck loading facility with a maximum capacity of 120 tons of product per hour.
- (e) One (1) aggregate storage area consisting of uncovered storage piles of sand and gravel.
- (f) Four (4) cold feed bins each with a maximum capacity of 20 tons, connected to one (1) screen with material transferred using mechanical conveyors.
- (g) Material handling and screening equipment capable of handling 120 tons of aggregate per hour and consisting of mechanical conveyors, elevators, screens, and mixers.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Comment 2:

Condition D.1.5(a) includes the statement "These conditions also make 326 IAC 2-2..., 40 CFR 52.21, and 326 2-7... for PM not applicable." Hoosier Hills believes that this statement is misleading because it implies that noncompliance with this condition will cause the source to be major under the PSD or Title V regulations. Hoosier Hills requested that this statement be removed from Condition D.1.5(a).

Response to Comment 2:

Since the potential to emit PM from this new asphalt plant is greater than 250 tons per year before controls, the PM emissions must be limited in this FESOP to ensure that the emissions do not exceed the thresholds for PSD. Based on the calculations in Appendix A of the TSD, the principal source of PM emissions is the asphalt dryer, which will use a baghouse to control the emissions. As indicated in Condition D.1.5(a), this source is also subject to the PM limitation in the NSPS 40 CFR 60, Subpart I, which limits the PM emissions to 0.04 grains/dscf. For this particular asphalt plant, the grain loading limit is equivalent to 13.3 pounds per hour or 58.25 tons per year. Therefore, if the source's PM emissions from the dryer do not exceed 57.1 pounds per hour, then the potential to emit PM emissions from the entire source will still be less than 250 tons per year. Hence, if the source is in compliance with the PM limit in 40 CFR 60, Subpart I, the PSD regulations are not applicable. The statement referred to by Hoosier Hills was included in the permit to indicate that no further conditions related to PSD were necessary, even

though the uncontrolled potential to emit PM exceeds 250 tons per year, because the source must comply with the more stringent New Source Performance Standard. The statement should not be interpreted to mean that the source will be out of compliance with PSD regulations if the source is out of compliance with 40 CFR 60, Subpart I. The IDEM would have to evaluate the magnitude of the NSPS violation and other factors to determine whether to pursue a violation of PSD. The reference to Title V regulations in the sentence was deleted because PM is not a pollutant that triggers the applicability of Title V. The following change was made to the permit:

D.1.5 Particulate Matter [40 CFR 60, Subpart I][40 CFR 60, Subpart A] [326 IAC 2-2] [40 CFR 52.21]

- (a) Pursuant to the New Source Performance Standards, 326 IAC 12 (40 CFR 60.90 to 60.93, Subpart I):

- (1) Particulate matter emissions from the asphalt plant shall not exceed 0.04 grains per dry standard cubic foot (gr/dscf), and
- (2) The visible emissions from the plant shall not exceed 20 percent opacity.

This emission limitation is equivalent to 13.3 pounds per hour (58.25 tons per year) based on an exhaust rate of 38,880 acfm and an exhaust temperature of 300 degrees Fahrenheit.

These conditions also make 326 IAC 2-2 (Prevention of Significant Deterioration), **and** 40 CFR 52.21, ~~and 326 IAC 2-7 (Part 70 Permit Program)~~ for PM not applicable.

- (b) Except when otherwise specified in 40 CFR 60, Subpart I, the Permittee shall comply with the provisions of 40 CFR 60, Subpart A, General Provisions.

Comment 3:

Hoosier Hills indicated in their comments on Condition D.1.6 that the limits on the solvent usage for the cold mix asphalt production were incorrect in the draft permit and asked IDEM, OAQ to revise the limits. Hoosier Hills also requested that the definitions of the liquid binder categories be added to Condition D.1.6.

Response to Comment 3:

IDEM, OAQ has reviewed the calculations for the VOC solvent limits and agrees that the limits in the draft permit are incorrect. IDEM, OAQ has made the following revisions to this condition to correct errors in the solvent usage limits and to clarify the intent of the original condition. The reporting form has also been revised to correct the errors in the VOC solvent limits.

D.1.6 FESOP Limitations [326 IAC 2-8][326 IAC 2-2][40 CFR 52.21]

- (b) Pursuant to 326 IAC 2-8-4, **the VOC emissions from cold mix asphalt production shall not exceed 98 tons per twelve (12) consecutive month period with compliance determined at the end of each month. To comply with this VOC limitation, the liquid binder used in cold mix asphalt production shall be limited as follows:**

- (1) Cutback asphalt rapid cure liquid binder usage shall not exceed **103 98**-tons of VOC solvent per twelve (12) consecutive month period rolled on a monthly basis.
- (2) Cutback asphalt medium cure liquid binder usage shall not exceed **140 133.3** tons of VOC solvent per twelve (12) consecutive month period rolled on a monthly basis.

- (3) Cutback asphalt slow cure liquid binder usage shall not exceed **392 372.4** tons of VOC solvent per twelve (12) consecutive month period rolled on a monthly basis.
- (4) Emulsified asphalt with solvent liquid binder usage shall not exceed **211 200.0** tons of VOC solvent per twelve (12) consecutive month period rolled on a monthly basis.
- (5) Other asphalt with solvent liquid binder shall not exceed **3,920 3,724** tons of VOC solvent per twelve (12) consecutive month period rolled on a monthly basis.
- (6) The VOC solvent allotments in (1) through (5) above shall be adjusted when more than one type of binder is used per twelve (12) month consecutive period rolled on a monthly basis. In order to determine the tons of VOC emitted per each type of binder, use the following formula and divide the tons of VOC solvent used for each type of binder by the corresponding adjustment ratio listed in the table that follows.

$$\frac{\text{Tons of solvent contained in binder}}{\text{Adjustment ratio}} = \text{tons of VOC emitted}$$

Type of binder	Tons VOC Solvent	Adjustment Ratio	Tons VOC Emitted
Cutback Asphalt Rapid Cure		1	
Cutback Asphalt Medium Cure		1.36	
Cutback Asphalt Slow Cure		3.8	
Emulsified Asphalt		2.04	
Other Asphalt		38	

The equivalent total tons of VOC of the combined liquid binders shall be less than 97.8 tons per twelve consecutive month period rolled on a monthly basis.

- (7) **Liquid binders used in the production of cold mix asphalt shall be defined as follows:**
 - (A) Cut back asphalt rapid cure, containing a maximum of 25.3% of the liquid binder by weight of VOC solvent and 95% by weight of VOC solvent evaporating.
 - (B) Cut back asphalt medium cure, containing a maximum of 28.6% of the liquid binder by weight of VOC solvent and 70% by weight of VOC solvent evaporating.
 - (C) Cut back asphalt slow cure, containing a maximum of 20% of the liquid binder by weight of VOC solvent and 25% by weight of VOC solvent evaporating.
 - (D) Emulsified asphalt with solvent, containing a maximum of 15% of liquid binder by weight of VOC solvent and 46.4% by weight of the VOC solvent in the liquid blend evaporating. The percent oil

distillate in emulsified asphalt with solvent liquid, as determined by ASTM, must be 7% or less of the total emulsion by volume

- (E) Other asphalt with solvent binder, containing a maximum 25.9% of the liquid binder of VOC solvent and 2.5% by weight of the VOC solvent evaporating.**

Compliance with these PM₁₀ and VOC limits makes the provisions of 326 IAC 2-7 and 326 IAC 2-2 (40 CFR 52.21) not applicable to this source.

Corrections made to the reporting form are shown below:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Single Liquid Binder Solvent Quarterly Report

Source Name: Hoosier Hills Paving By James & Sons, Inc.
Initial Source Address: Rural Route 4, Bloomfield, Indiana 47424
Mailing Address: Rural Route 4, Box 545, Bloomfield, Indiana 47424
FESOP No.: F055-15634-00038
Facility: Asphalt Plant
Parameter: VOC Solvent
Limit: Cutback asphalt rapid cure liquid binder usage shall not exceed ~~98.0~~ **103** tons of VOC solvent per twelve (12) consecutive month period rolled on a monthly basis. Cutback asphalt medium cure liquid binder usage shall not exceed ~~433.3~~ **140** tons of VOC solvent per twelve (12) consecutive month period rolled on a monthly basis. Cutback asphalt slow cure liquid binder usage shall not exceed ~~372.4~~ **392** tons of VOC solvent per twelve (12) consecutive month period rolled on a monthly basis. Emulsified asphalt with solvent liquid binder usage shall not exceed ~~200.0~~ **211** tons of VOC solvent per twelve (12) consecutive month period rolled on a monthly basis. Other asphalt with solvent liquid binder shall not exceed ~~3,724~~ **3,920** tons of VOC solvent per twelve (12) consecutive month period rolled on a monthly basis.

Comment 4:

Condition D.1.10 states that "PM-10 includes filterable and condensable PM-10." In their comments, Hoosier Hills requested this statement be deleted from the permit because PM-10 is defined by the aerodynamic diameter of the particulate matter. In addition, IDEM did not identify the specific authority to require the condensable fraction be included in the definition of PM-10.

Response to Comment 4:

Condition D.1.10 requires testing to demonstrate compliance with the FESOP limit of 0.027 pounds per ton of product. This limit is based on the AP-42 emission factor for PM-10 for batch mix asphalt plants. The AP-42 emission factor for PM-10 includes both filterable and condensable particulate matter. US EPA considers condensable particulate matter to be PM-10 and includes both the filterable and condensable fractions in calculating the PM-10 emission rate.

Comment 5:

Hoosier Hills stated in their comments that the baghouse inspections included in Condition D.1.13 should be considered part of the Preventive Maintenance Plan and should not be included as a separate permit condition. Hoosier Hills believes that IDEM does not have the authority to require this condition since there are no explicit applicable regulations. Hoosier Hill requested that this condition be removed from the permit.

Response to Comment 5:

IDEM, OAQ included the requirement for baghouse inspections because the baghouse must be operating properly in order for the source to meet the PM and PM-10 emission limits included in Conditions D.1.5(a) and D.1.6(a), respectively. The baghouse inspection requirement, combined with the parametric monitoring in Condition D.1.12, ensure that the baghouse is operating correctly. Note that under 326 IAC 2-8-5(a), the FESOP is required to contain "compliance certification, testing, monitoring, reporting, and record keeping requirements sufficient to assure compliance with the terms and conditions of the FESOP." Therefore, no changes have been made to the permit.

Comment 6:

Hoosier Hills believes that the response steps concerning broken or failed bags (Condition D.1.14 should be considered part of the Compliance Monitoring and Response Plan and should not be included as a separate permit condition. In addition, Hoosier Hills believes that IDEM does not have the authority to require this condition since there are no explicit applicable regulations. Furthermore, Condition B.12, Emergency Provisions, dictates the steps to take in the event of an emergency. We request that this condition be deleted from the permit.

Response to Comment 6:

Condition D.1.14 is a standard condition that prohibits the Permittee from operating emission units when a bag failure has been observed. IDEM, OAQ included this condition in the permit because the baghouse must operate properly in order for the source to meet the PM and PM-10 emission limits included in Conditions D.1.5(a) and D.1.6(a), respectively. Note that under 326 IAC 2-8-5(a), the FESOP is required to contain "compliance certification, testing, monitoring, reporting, and record keeping requirements sufficient to assure compliance with the terms and conditions of the FESOP." Therefore, no changes have been made to the permit.

Comment 7:

40 CFR 60.110b(b) states that storage vessels with design capacity less than 75 cubic meters are exempt from Part 60, Subpart A and from the provisions of Subpart Kb, except as specified in 60.116(b). Also 40 CFR 110b(c) states that storage vessels with design capacity less than 151 cubic meters are exempt from Part 60, Subpart A and from the provisions of Subpart Kb, except as specified in 40 CFR 60.116(b). Tank T-1 has a capacity less than 75 cubic meters and Tank T-2 has a capacity greater than 75 cubic meters but less than 151 cubic meters. 40 CFR 60.116b(b) states that "each storage vessel with a design capacity of less than 75 cubic meters is subject to no provision of this subpart other than those required by this paragraph." Therefore, the only requirements for Tank T-1 is to keep records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. The record keeping requirements stated in Condition D.2.6 apply to tanks which have capacities greater than 75 cubic meters, which would only include Tank T-2. For these reasons, Hoosier Hills requested that Conditions D.2.5 and D.2.6 be revised to reflect that the only record keeping requirements for Tank T-1 are the tank dimensions and capacity.

Response to Comment 7:

Although Tank T-2 has a capacity greater than 75 cubic meters, the capacity is less than 151 cubic meters and is used to store liquids with a maximum true vapor pressure less than 15.0 kPa. Tank T-1 has a

capacity less than 75 cubic meters. Therefore, the storage tanks (identified as Tank T-1 and Tank T-2) are only subject to 40 CFR 60.116b(b). This rule requires the source to maintain records of the dimension of each storage vessel and an analysis of the capacity. Note that 40 CFR 60.116b(d) does not apply when the tank is greater than 151m³ and the vapor pressure of the liquid stored in the tank is less than 3.5kPa. It also does not apply when the tank is between 75 and 151m³ and the vapor pressure is less than 15kPa. Tank T-2 has a capacity between 75 and 151m³ and the vapor pressure of the stored liquid is less than 15kPa. Therefore, 40 CFR 60.116b(d) does not apply. No change was necessary for Condition D.2.5. The following revisions have been made to Condition D.2.6.

D.2.6 Record Keeping Requirements

Pursuant to 40 CFR 60, Subpart Kb (326 IAC 12), the Permittee shall maintain records ~~in accordance with (a) through (d) below:~~ **of the**

- ~~(a) The volatile organic liquid stored in each tank; The dimensions of each storage tank; and~~
- ~~(b) The period of storage;~~
- ~~(c) The maximum true vapor pressure of the volatile organic liquid during the storage period; and~~
- ~~(d) The dimensions of the storage tanks and an analysis showing the capacity of the storage tanks.~~ **These records shall be maintained for the life of the source.**

~~The Permittee shall notify the Administrator within 30 days when the maximum true vapor pressure of the liquid exceeds the respective maximum true vapor pressure values for each volume range. (Available data on the storage temperature may be used to determine the maximum vapor pressure as indicated in 40 CFR 60.117(b)(e)(1) through (3).)~~

Comment 8:

On page 5 of the TSD, the discussion of applicability of 40 CFR 60, Subpart Kb does not include the reference to the applicable record keeping requirements for Tank T-1 and states that the source must comply with the requirements of 40 CFR 60.115b. This reference should be changed from 40 CFR 60.115b to 40 CFR 60.116b.

Response to Comment 8:

IDEM, OAQ has reviewed the referenced text and agrees that the correct rule citation should have been 40 CFR 60.116b and not 40 CFR 60.115b as stated. However, no changes have been made to the TSD because the OAQ prefers that the TSD reflect the permit that was on public notice. Changes to the permit or technical support material that occur after the public notice are documented in this Addendum to the Technical Support Document. This accomplishes the desired result of ensuring that these types of concerns are documented and part of the record regarding this permit decision.

Comment 9:

In Section A.1, the responsible official should be Mr. Marty James and not Mr. Martin James as stated in the draft permit.

Response to Comment 9:

IDEM, OAQ has corrected the name of the responsible official as requested by Hoosier Hills. The following change has been made to the permit:

A.1 General Information [326 IAC 2-8-3(b)]

The Permittee owns and operates a hot-mix asphalt plant.

Authorized individual:	Mr. Martin Marty James, Vice President
Source Address:	Rural Route 4, Bloomfield, Indiana 47424
Mailing Address:	Rural Route 4, Box 545, Bloomfield, Indiana 47624
SIC Code:	2951
Source Location Status:	Greene
County Status:	Attainment for all criteria pollutants
Source Status:	Federally Enforceable State Operating Permit (FESOP) Minor Source under PSD; Minor Source under Section 112 of the Clean Air Act Not 1 of 28 Source Categories

Comment 10:

In Condition B13(a), the word “days” should be added so that it reads “...within sixty (60) days after issuance...”

Response to Comment 10:

IDEM, OAQ agrees that the word “days” should be added to the sentence and has made the following revisions to this condition:

B.13 Preventive Maintenance Plan [326 IAC 1-6-3] [326 IAC 2-8-4(9)] [326 IAC 2-8-5(a)(1)]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within sixty (60) **days** after issuance of this permit, including the following information on each facility:

Comment 11:

The maximum capacities for tanks T-1 and T-2 should be 16,050 gallons and 26,510 gallons, respectively. The dimensions of Tank T-1 are 23 feet long and 10.9 feet in diameter, which equates to 61 cubic meters and 16,050 gallons. The dimensions for Tank T-2 are 50 feet long and 9.5 feet in diameter, which equates to 100 cubic meters and 26,510 gallons. This change to the size of the tanks does not change the rule applicability.

Response to Comment 11:

IDEM, OAQ has revised the descriptions of the tanks in Condition A.2 and Section D.2 to reflect the new storage tank capacities. IDEM, OAQ agrees that this correction does not change the applicability of any State or Federal regulation. The following corrections have been made to the permit.

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

- (h) Two (2) asphalt cement tanks (identified as T-1 and T-2) with a maximum capacities of **16,050** ~~15,000~~ gallons and **26,510** ~~20,000~~ gallons, respectively.

Ms. Mona Fuller, a local resident, submitted the following comments on the proposed construction permit for the Hoosier Hills asphalt plant:

Comment 1:

Ms. Fuller indicated in her letter to IDEM, OAQ that she is concerned about possible negative impacts of the new asphalt plant. Ms. Fuller stated that an asphalt had previously been located at this site several

years ago. The previous plant generated “dirt and thick black smoke” that damaged the siding on local resident’s homes and represented “a health hazard to the people in this community.”

Response to Comment 1:

The permit includes emission limitations for particulate matter (PM) and particulate matter with aerodynamic diameter of less than 10 microns (PM-10). The emissions of PM are limited to 13.3 pounds per hour and the emissions of PM-10 are limited to 3.24 pounds of PM-10 per hour. In order to comply with these limits, Hoosier Hills is required to operate a baghouse to collect the emissions of particulate matter and to conduct PM and PM-10 stack tests to ensure compliance with these limits.

In order to ensure that the baghouse is operating correctly, IDEM, OAQ has included several provisions in the permit. These provisions include Conditions D.1.12 (Parametric Monitoring), D.1.13 (Baghouse Inspections), and D.1.10 (Testing Requirements). Hoosier Hills Paving is required in Condition D.1.10 to perform PM and PM-10 testing within 60 days of achieving the maximum production rate, but not later than 180 days after initial startup. In addition to these conditions, Condition D.1.14 requires the company to immediately shutdown the dryer when baghouse failure is observed. IDEM, OAQ also requires the source perform visible emission notations once per shift to ensure that the plant is in compliance with the opacity rules in 326 IAC 5-1.

In order to minimize fugitive particulate matter emissions, Hoosier Hills has prepared a Fugitive Particulate Matter Plan as required by 326 IAC 6-5. This plan is included in Appendix A of the permit and includes the use of water or other dust suppressants to minimize emissions of particulate matter from the storage piles and roadways.

Based on the provisions of this permit, IDEM, OAQ believes that this source will not produce “dirt and thick black smoke”. However, if problems are observed individuals should contact the local Air Compliance Inspector, Vaughn Ison at (317) 233-0432.

Comment 2:

Ms. Fuller stated that she had reviewed Hoosier Hills’ permit application filed at the local library and believed that approximately seven local residents had not been informed of the proposed construction. Ms. Fuller asked IDEM, OAQ to make sure that all the local residents had been informed. Ms. Fuller provided a list of residents, whose names and addresses did not appear on Form EE of the company’s application form.

Response to Comment 2:

On June 6, 2002, IDEM, OAQ sent a notice of deficiency to Mr. Marty James (the Vice President of Hoosier Hills) indicating Ms. Fuller’s concern that not all local residents had been informed and stating Hoosier Hills’ responsibility to inform “adjacent property owners.” In his response, Mr. James stated that he had obtained the names and addresses of adjacent property owners from the Greene County courthouse, and based on this information, believed that all “adjacent property owners” had been notified of the proposed construction. However, Mr. James indicated that he had “out of good faith” contacted either by telephone or by mail the local residents specifically listed by Ms. Fuller.

August 27, 2002

**Indiana Department of Environmental Management
Office of Air Quality**

**Technical Support Document (TSD) for a New Source Construction and
a Federally Enforceable State Operating Permit (FESOP)**

Source Background and Description

Source Name:	Hoosier Hills Paving By James & Sons, Inc.
Source Location:	Rural Route 4, Bloomfield, Indiana 47424
County:	Greene
SIC Code:	2951
Operation Permit No.:	F055-15634-00038
Permit Reviewer:	ERG/AB

The Office of Air Quality (OAQ) has reviewed a FESOP application from Hoosier Hills Paving By James & Sons, Inc. (Hoosier Hills) relating to the operation of a batch hot-mix asphalt.

New Emission Units and Pollution Control Equipment

This new source will consist of the following permitted emission units and pollution control devices:

One (1) batch hot-mix asphalt plant, with a maximum throughput capacity of 120 tons per hour, consisting of the following emission units:

- (a) Two (2) natural gas-fired oil heaters (identified as H-1 and H-2), each having a maximum heat input capacity of 0.852 MMBtu per hour. Both heaters use No. 2 fuel oil with a maximum sulfur content of 0.5% by weight as an alternate fuel.
- (b) One (1) natural gas-fired rotary dryer having a maximum heat input capacity of 66 MMBtu per and a maximum throughput capacity of 120 tons per hour. Particulate matter emissions are controlled by a cyclone and baghouse (identified as BH-01), exhausting at stack S-1.
- (c) One (1) batching tower pug mill with a maximum throughput capacity of 120 tons per hour. Emissions of particulate matter are controlled by a cyclone and baghouse (identified as BH-01), exhausting at stack S-1.
- (d) One (1) hot mix asphalt truck loading facility with a maximum capacity of 120 tons of product per hour.
- (e) One (1) aggregate storage area consisting of uncovered storage piles of sand and gravel.
- (f) Four (4) cold feed bins each with a maximum capacity of 20 tons, connected to one (1) screen with material transferred using mechanical conveyors.

- (g) Material handling and screening equipment capable of handling 120 tons of aggregate per hour and consisting of mechanical conveyors, elevators, screens, and mixers.
- (h) Two (2) asphalt cement tanks (identified as T-1 and T-2) with a maximum capacities of 15,000 gallons and 20,000 gallons, respectively.

Permitted Emission Units and Pollution Control Equipment

There are no permitted facilities operating at this source during this review process.

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted facilities operating at this source during this review process.

Insignificant Activities

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) Equipment powered by internal combustion engines of capacity equal to or less than 0.5 MMBtu per hour.
- (b) A gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling tanks, locomotives, automobiles, having a storage capacity less than or equal to 10,500 gallons.
- (c) A petroleum fuel, other than gasoline, dispensing facility, having a storage capacity of less than or equal to 10,500 gallons, and dispensing less than 230,000 gallons per month.
- (d) Vessels storing lubricating oils, hydraulics oils, machining oils, and machining fluids.
- (e) Packaging lubricants and greases.
- (f) Filling drums, pails, or other packaging containers with lubricating oils, waxes, and greases.
- (g) Application of oils, greases, lubricants or other nonvolatile materials applied as temporary protective coatings.
- (h) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, and welding equipment.
- (i) Replacement or repair of electrostatic precipitators, bags in baghouses, and filters in other air filtration equipment.
- (j) Heat exchanger cleaning and repair.
- (k) Paved roads and parking lots with limited public access.

Existing Approvals

No previous approvals have been issued to this source.

Enforcement Issues

There are no enforcement actions pending.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (EF)
S-1	Asphalt Plant	13.0	4.0	38,880	300

Recommendation

The staff recommends to the Commissioner that the FESOP be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An administratively complete FESOP application for the purposes of this review was received on May 15, 2002.

There was no notice of completeness letter mailed to the source.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (pages 1 through 9).

Potential To Emit for the Source

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA.”

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	16,822
PM-10	2,365
SO ₂	4.0
VOC	>100 ^a
CO	24.9
NO _x	30.0

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

^a The principal source of VOC emissions from an asphalt plant is the use of liquid binders for cutback and emulsified asphalt products. Since the VOC content and amount of binder used may vary, IDEM has estimated that VOC

emissions from this new source could exceed 100 tons per year.

HAP's	Potential To Emit (tons/year)
TOTAL	3.9

- (a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of PM₁₀ and VOC are equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (b) Pursuant to 326 IAC 2-8, this source, otherwise required to obtain a Title V permit, has agreed to accept a permit with federally enforceable limits that restrict PTE to below Title V emission levels. Therefore, this source will be issued a Federally Enforceable State Operating Permit (FESOP).
- (c) Fugitive Emissions
 This type of operation is not one of the twenty-eight (28) listed source categories. There is applicable New Source Performance Standards that were in effect on August 7, 1980; therefore, the fugitive emissions are counted toward determination of PSD and Emission Offset applicability.

Potential to Emit After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Federally Enforceable State Operating Permit.

Process/facility	Potential to Emit (tons/year)						
	PM	PM-10	SO ₂	VOC	CO	NO _x	HAPs
Batch Mixer and Dryer	58.4	14.2	0.2	1.6	24.3	28.9	3.9
Hot Oil Heaters	0.12	0.12	3.79	0.04	0.63	1.07	Negligible
Storage Piles	0.01	0.004	--	--	--	--	--
Material Handling and Conveying	1.4	0.10	--	--	--	--	--
Paved Roads	0.74	0.15	--	--	--	--	--
Cold Mix Cutback Asphalt	--	--	--	Less than 98	--	--	--
Total Emissions	60.7	14.6	4.0	Less than 100	24.9	30.0	11.5

County Attainment Status

The source is located in Greene County.

Pollutant	Status
PM-10	Attainment
SO ₂	Attainment
NO ₂	Attainment

Ozone	Attainment
CO	Attainment
Lead	Attainment

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Greene County has been designated as attainment or unclassifiable for ozone.
- (b) Greene County has been classified as attainment or unclassifiable for all criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

Federal Rule Applicability

- (a) This source is subject to the New Source Performance Standard (NSPS), 40 CFR 60, Subpart I (326 IAC 12) - Standards of Performance for Hot Mix Asphalt Facilities because it is a new source and manufactures hot mix asphalt by heating and drying aggregate and mixing with asphalt cements. This NSPS requires the source to comply with the following requirements:
 - (1) Particulate matter emissions from the asphalt plant shall not exceed 0.04 grains per dry standard cubic foot (gr/dscf), and
 - (2) The visible emissions from the plant shall not exceed 20 percent opacity.
- (b) This source is subject to the New Source Performance Standard (NSPS), 40 CFR 60, Subpart Kb (326 IAC 12) - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984, because the storage tanks (identified as T-1 and T-2) will be constructed after 1984, will be larger than 40 m³ (10,569 gallons), and will be used to store volatile organic compounds. Tank T-1 is exempt from the General Provisions (Part 60, Subpart A) and from the limits of this subpart because it has a maximum capacity less than 75 m³ (19,817 gallons). Tank T-2 is exempt from the General Provisions (Part 60, Subpart A) and from the limits of this subpart because it has a maximum capacity greater than 75 m³ (19,817 gallons) and less than 151 m³ (39,898 gallons), and is used to store liquids with a maximum true vapor pressure less than 15.0 KPa (2.16 psi). Although there are no limits applicable to these storage tanks, the source must comply with the applicable record keeping requirements specified in 40 CFR 60.115b.
- (c) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14 and 40 CFR Part 63) applicable to this source.

State Rule Applicability - Entire Source

326 IAC 2-6 (Emission Reporting)

This source is located in Greene County and the potential to emit all regulated pollutants is less than one hundred (100) tons per year. Therefore, 326 IAC 2-6 does not apply.

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

326 IAC 2-8-4 (FESOP)

- (a) The unlimited potential to emit PM_{10} from this asphalt plant is greater than 100 tons per year. The source has agreed to limit emissions of PM_{10} from the entire source to less than 100 tons per year, by limiting the PM_{10} emissions from the aggregate dryer and mixer to less than 0.027 pounds of PM_{10} per ton of asphalt produced. This is equivalent to PM_{10} emissions for the dryer of less than 14.2 tons per twelve (12) consecutive month period. The PM_{10} emissions for the entire source are, therefore, limited to less than 14.6 tons per twelve (12) consecutive month period.
- (b) Pursuant to 326 IAC 2-8-4, the liquid binder used in cold mix asphalt production shall be limited as follows:
 - (1) Cutback asphalt rapid cure liquid binder usage shall not exceed 98 tons of VOC solvent per twelve (12) consecutive month period rolled on a monthly basis.
 - (2) Cutback asphalt medium cure liquid binder usage shall not exceed 133.3 tons of VOC solvent per twelve (12) consecutive month period rolled on a monthly basis.
 - (3) Cutback asphalt slow cure liquid binder usage shall not exceed 372.4 tons of VOC solvent per twelve (12) consecutive month period rolled on a monthly basis.
 - (4) Emulsified asphalt with solvent liquid binder usage shall not exceed 200.0 tons of VOC solvent per twelve (12) consecutive month period rolled on a monthly basis.
 - (5) Other asphalt with solvent liquid binder shall not exceed 3,724 tons of VOC solvent per twelve (12) consecutive month period rolled on a monthly basis.
 - (6) The VOC solvent allotments in (1) through (5) above shall be adjusted when more than one type of binder is used per twelve (12) month consecutive period rolled on a monthly basis. In order to determine the tons of VOC emitted per each type of binder, use the following formula and divide the tons of VOC solvent used for each type of binder by the corresponding adjustment ratio listed in the table that follows.

$$\frac{\text{Tons of solvent contained in binder}}{\text{Adjustment ratio}} = \text{tons of VOC emitted}$$

Type of binder	Tons VOC Solvent	Adjustment Ratio	Tons VOC Emitted
Cutback Asphalt Rapid Cure		1	

Cutback Asphalt Medium Cure		1.36	
Cutback Asphalt Slow Cure		3.8	
Emulsified Asphalt		2.04	
Other Asphalt		38	

The equivalent total tons of VOC of the combined liquid binders shall be less than 97.8 tons per twelve consecutive month period rolled on a monthly basis.

Compliance with these PM₁₀ and VOC limits makes 326 IAC 2-7 and 326 IAC 2-2 (40 CFR 52.21) not applicable to this source.

326 IAC 2-2 (Prevention of Significant Deterioration)

- (a) The emissions of PM from the asphalt plant shall be limited to 0.04 grains per dry standard cubic foot. This is equivalent to a particulate matter emission rate of 13.3 pounds per hour (58.25 tons per year) at an exhaust flow rate of 38,880 cubic foot per minute (cfm). Compliance with this limit will make the source a minor source under PSD and will ensure compliance with New Source Performance Standards, 326 IAC 12 (40 CFR 60.90 to 60.93, Subpart I). Use of the baghouse (identified as BH-1) will ensure compliance with this limit.
- (b) Pursuant to 326 IAC 2-8-4 (b) (FESOP), the PM₁₀ and VOC emissions for the entire source are limited to less than 14.6 tons per year and 100 tons per year, respectively. Compliance with these limits ensures that 326 IAC 2-2 (PSD) and 40 CFR 52.21 are not applicable.

326 IAC 6-4 (Fugitive Dust Emissions)

Pursuant to 326 IAC 6-4, the source shall not generate fugitive dust to the extent that some portion of the material escapes beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located.

326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)

This source is subject to the requirements of 326 IAC 6-5 because it will be constructed after December 13, 1985 and is a source of fugitive particulate matter emissions. As required by this rule, the source has submitted a Fugitive Particulate Matter Emission Control Plan. The plan is included as Attachment A to the permit.

State Rule Applicability - Asphalt Plant

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))

The operation of the asphalt plant will emit less than 10 tons per year of a single HAP or 25 tons per year of a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

326 IAC 6-3-2 (Process Operations)

This source is subject to the New Source Performance Standard 40 CFR 60, Subpart I (326 IAC 12); therefore, the provisions of 326 IAC 6-3-2 (Process Operations) do not apply.

326 IAC 8-1-6 (New Facilities - General Reduction Requirements)

Although the asphalt manufacturing facility has potential VOC emissions above the 25 tons per year threshold, this source is not subject to 326 IAC 8-1-6 because it is subject to 326 IAC 8-5-2 (Miscellaneous Operations: Asphalt Paving).

326 IAC 8-5-2 (Miscellaneous Operations: Asphalt Paving)

Pursuant to 326 IAC 8-5-2, no person shall cause or allow the use of cutback asphalt or asphalt emulsion containing more than 7 percent oil distillate by volume of emulsion of any paving application except:

- (a) Penetrating prime coating;
- (b) Stockpile storage; and
- (c) Application during the months of November, December, January, February, and March.

326 IAC 7-1.1-2 (Sulfur Dioxide (SO₂) Emission Limitations)

The dryer and oil heaters are not subject to the provisions of 326 IAC 7-1.1-2, because the SO₂ emissions from these units are less than 25 tons per year.

Testing Requirements

To document compliance with the PM and PM₁₀ limits, the source is required to perform PM and PM₁₀ testing within 60 days of achieving the maximum production rate, but not later than 180 days after initial startup. The tests shall be performed using methods as approved by the Commissioner. PM₁₀ includes filterable and condensable PM₁₀.

These stack tests are required to ensure compliance with 40 CFR 60, Subpart I, 326 IAC 2-8, and 326 IAC 2-2.

Compliance Requirements

Permits issued under 326 IAC 2-8 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-8-4. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this source are as follows:

1. The asphalt plant has applicable compliance monitoring conditions as specified below:
 - (a) Once per shift visible emissions notations of the dryer exhaust stack (S-1) shall be performed during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the

greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

- (b) The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the dryer at least once per shift when the dryer is in operation and venting to the atmosphere. When for any one reading, the pressure drop across the baghouse is outside the normal range of 2.0 and 4.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with the Compliance Response. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.
- (c) An inspection shall be performed each calendar quarter of all bags controlling the dryer when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting indoors. All defective bags shall be replaced.
- (d) In the event that bag failure has been observed:
 - (1) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency. Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion.
 - (2) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency.

Conclusion

The operation of this hot mix asphalt plant shall be subject to the conditions of the attached FESOP No.: F055-15634-00038.

Appendix A: Emissions Calculations**Natural Gas-fired Rotary Dryer**

Company Name: Hoosier Hills Paving
Address City IN Zip: R.R. 4, Box 545, Bloomfield, Indiana 47424
CP: 055-15634
Plt ID: 055-00038
Reviewer: ERG/AB
Date: May 21, 2002

Heat Input Capacity
MMBtu/hr

Potential Throughput
MMCF/yr

66.0

578.2

Emission Factor in lb/MMCF	SO ₂	Pollutant		
		NO _x	VOC	CO
		100.0	5.5	84.0
	0.6	**see below		
Potential Emission in tons/yr	0.2	28.9	1.6	24.3

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

**Emission Factors for NO_x: Uncontrolled = 100, Low NO_x Burner = 50, Low NO_x Burners/Flue gas recirculation = 32

The emissions of PM and PM10 from the Rotary Dryer are estimated using the AP-42 Chapter 11.1 emission factors for asphalt plants, and are shown on page 1. The emissions of SO₂, NO_x, VOC and CO are estimated using the boiler emission factors from AP-42 Chapter 1.4, as shown above. These boiler emission factors are being used for these pollutants based on IDEM guidance.

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Appendix A: Emission Calculations

Emission Calculations

Conventional Batch Mix Plant: Rotary Dryer, Natural Gas-Fired

Company Name: Hoosier Hills Paving

Address City IN Zip: R.R. 4, Box 545, Bloomfield, Indiana 47424

CP: 055-15634

Plt ID: 055-00038

Reviewer: ERG/AB

Date: May 21, 2002

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Maximum Capacity
120 tons/hr

	Uncontrolled Emission Factors
PM	32 lbs/ton
PM-10	4.5 lbs/ton
Total HAPs	0.0075 lbs/ton

	Controlled Emission Factors
PM	0.042 lbs/ton
PM-10	0.027 lbs/ton
Total HAPs	0.0075 lbs/ton

See page 1 of the appendix for emission estimates for the other pollutants of combustion from the rotary dryer.

Uncontrolled	PM	PM-10	HAPs
Emissions (tons/yr)	16819.2	2365.2	3.9

Controlled	PM	PM-10	HAPs
Emissions (tons/yr)	22.1	14.2	3.9

Methodology: (Maximum capacity)*(8760 hr/yr)*(emission factor)*(1 ton/2000 lbs)

* Emission factors for natural gas rotary dryers controlled with a fabric filter from AP-42 Chapter 11.1, Table 11.1-1 are 0.027 lb/ton and 0.042 lbs/ton for PM-10 and PM, respectively. The emission factors shown above are those emission factors required to limit the source to less than

* Emission factor for HAPs is from AP-42 Chapter 11.1, Table 11.1-9.

* The largest HAP is Xylene.

Appendix A: Emission Calculations**Combustion of Fuel Oil No. 2****MMBTU/HR<100****Asphaltic Cement Heaters each with a maximum heat input capacity of 0.852 MMBtu/hr****Company Name: Hoosier Hills Paving****Address City IN Zip: R.R. 4, Box 545, Bloomfield, Indiana 47424****CP: 055-15634****Pit ID: 055-00038****Reviewer: ERG/AB****Date: May 29, 2002**Heat Input Capacity
MMBTu/hrPotential Throughput
kgals/year

S = Weight % Sulfur

0.5

1.7

106.6

	Pollutant				
	PM*	SO ₂	NO _x	VOC	CO
Emission Factor in lb/kgal	2.0	71 (142.0 S)	20.0	0.34	5.0
Potential Emission in tons/yr	0.107	3.785	1.066	0.018	0.267

*PM emission factor is filterable PM only. Condensable PM emission factor is 1.3 lb/kgal.

Methodology

1 gallon of No. 2 Fuel Oil has a heating value of 140,000 Btu

Potential Throughput (kgals/year) = Heat Input Capacity (MMBTu/hr) x 8,760 hrs/yr x 1 kgal/1,000 gal x 1 gal/0.140 MMBtu

Emission Factors are from AP-42, Tables 1.3-1, 1.3-2, and 1.3-3 (SCC 1-03-005-01/02/03) Supplement E 9/98 (see errata file)

Emission (tons/yr) = Throughput (kgals/yr) x Emission Factor (lb/kgal)/2,000 lb/ton

Appendix A: Emission Calculations

Combustion of Fuel Oil No. 2

MMBTU/HR<100

Asphaltic Cement Heaters each with a maximum heat input capacity of 0.852 MMBtu/hr

HAP Emissions

Company Name: Hoosier Hills Paving

Address City IN Zip: R.R. 4, Box 545, Bloomfield, Indiana 47424

CP: 055-15634

Pit ID: 055-00038

Reviewer: ERG/AB

Date: May 29, 2002

HAPs - Metals

Emission Factor in lb/MMBtu	Arsenic 4.0E-06	Beryllium 3.0E-06	Cadmium 3.0E-06	Chromium 3.0E-06	Lead 9.0E-06
Potential Emission in tons/yr	2.99E-05	2.24E-05	2.24E-05	2.24E-05	6.72E-05

HAPs - Metals (continued)

Emission Factor in lb/MMBtu	Mercury 3.0E-06	Mangamese 6.0E-06	Nickel 3.0E-06	Selenium 1.5E-05
Potential Emission in tons/yr	2.24E-05	4.48E-05	2.24E-05	1.12E-04

Methodology

No data was available in AP-42 for organic HAPs.

Potential Emissions (tons/year) = Throughput (MMBTu/hr)*Emission Factor (lb/MMBTu)*8,760hrs/yr / 2,000lb/ton

**Appendix A: Emission Calculations
Natural Gas Combustion Only
MMBTU/HR<100**

Asphaltic Cement Heaters each with a maximum heat input capacity of 0.852 MMBtu/hr

**Company Name: Hoosier Hills Paving
Address City IN Zip: R.R. 4, Box 545, Bloomfield, Indiana 47424
CP: 055-15634
Pit ID: 055-00038
Reviewer: ERG/AB
Date: May 21, 2002**

Heat Input Capacity
MMBtu/hr

Potential Throughput
MMCF/yr

1.7

14.9

	Pollutant					
Emission Factor in lb/MMCF	PM*	PM10*	SO2	NO _x	VOC	CO
	7.6	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.057	0.057	0.004	0.746	0.041	0.627

*PM emission factor is filterable PM only. PM10 emission factor is condensable and filterable PM10 combined.

**Emission Factors for NO_x: Uncontrolled = 100, Low NO_x Burner = 50, Low NO_x Burners/Flue gas recirculation = 32

Methodology

All Emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF - 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors from AP-42, Chapter 1.4, Tables 1.4-1, 1.4-2, and 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (AP-42 Supplement D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Appendix A: Emission Calculations**Potential to Emit Calculations for Paved Roads****Company Name:** Hoosier Hills Paving**Address City IN Zip:** R.R. 4, Box 545, Bloomfield, Indiana 47424**CP:** 055-15634**Plt ID:** 055-00038**Reviewer:** ERG/AB**Date:** May 29, 2002

Vehicle Type	Weight (tons)	Round Trip Distance (miles)	Number of Trips per hour	Total Miles per year	Miles traveled as Fraction of total	Truck Weight fraction
Loaders	12.5	0.114	22.8	22,769	0.644	8.05
Tri-Axel Dump Trucks	22	0.123	4.6	4,956	0.140	3.08
Quad Dump Trucks	24.5	0.123	1	1,077	0.030	0.75
Semi-Tractor/Tankers	25.5	0.123	0.3	323	0.009	0.23
Tri-Axel Dump Trucks	22	0.123	4.8	5,172	0.146	3.22
Quad Dump Trucks	24.5	0.123	1	1,077	0.030	0.75
Total				35,376	1	16

Average Vehicle Weight = 16 tons

	PM-10	PM
k (lbs/vmt) =	0.016	0.082
sL =	0.015	0.015
W =	16	16
E =	0.0082	0.0420
Miles traveled per year =	35376	35376
Emissions (tons/year) =	0.145	0.743

Methodology

Equation:

$$E = k (sL/2)^{0.65} (W/3)^{1.5}$$

where:

E = particulate emission factor (having units matching the units of k)

k = base emission factor for particle size range and units of interest (see below)

sL = road surface silt loading (grams per square meter) (g/m)²

W = average weight (tons) of the vehicles traveling the road

Equation is from AP-42, Chapter 13.2.1 (Paved Roads)

Appendix A: Emission Calculations

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Potential to Emit Calculations for Storage Piles

Company Name: Hoosier Hills Paving

Address City IN Zip: R.R. 4, Box 545, Bloomfield, Indiana 47424

CP: 055-15634

Plt ID: 055-00038

Reviewer: ERG/AB

Date: May 21, 2002

$$E_f = \frac{1.7 \cdot (s/1.5) \cdot (365-p)}{235 \cdot (f/15)}$$

where:

s =	2.5 % silt for sand
s =	1.2 % silt for stone
s =	1 % silt for slag
s =	2.5 % silt for gravel
s =	0.8 % silt for RAP
p =	125 days of rain greater than or equal to 0.01 inches
f =	15 % of wind greater than or equal to 12 mph

E_f = 2.89 lb/acre/day for sand

E_f = 1.39 lb/acre/day for stone

E_f = 1.16 lb/acre/day for slag

E_f = 2.89 lb/acre/day for gravel

E_f = 0.93 lb/acre/day for RAP

$$E_p (\text{storage}) = \frac{E_f \cdot sc \cdot (20 \text{ cuft/ton}) \cdot (365 \text{ day/yr})}{(2000 \text{ lb/ton}) \cdot (43560 \text{ sqft/acre}) \cdot (25 \text{ ft})}$$

sc = 600 tons storage capacity for sand

sc = 0 tons storage capacity for stone

sc = 0 tons storage capacity for slag

sc = 600 tons storage capacity for gravel

sc = 0 tons storage capacity for RAP

E_p = 0.01 tons/yr for sand

E_p = 0.00 tons/yr for stone

E_p = 0.00 tons/yr for slag

E_p = 0.01 tons/yr for gravel

E_p = 0.00 tons/yr for RAP

E_p Total = 0.01 tons/yr of PM

PM-10 = 35% of PM:

E_p = 0.0020 tons/yr for sand

E_p = 0.0000 tons/yr for stone

E_p = 0.0000 tons/yr for slag

E_p = 0.0020 tons/yr for gravel

E_p = 0.0000 tons/yr for RAP

E_p Total = 0.0041 tons/yr of PM-10

50% is emitted after controls

PM = 0.01 tons/yr

PM-10 = 0.00 tons/yr

Appendix A: Emission Calculations

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Potential to Emit Calculations for Conveying and Handling

Company Name: Hoosier Hills Paving

Address City IN Zip: R.R. 4, Box 545, Bloomfield, Indiana 47424

CP: 055-15634

Plt ID: 055-00038

Reviewer: ERG/AB

Date: May 21, 2002

Handle: 114 tons/hr

$$Ef = .0032 * \frac{(U/5)^{1.3}}{(M/2)^{1.4}} * k$$

where:

k_{PM10} = 0.35 (particle size multiplier)

k_{PM} = 0.74 (particle size multiplier)

M = 4 % moisture

U = 12 mph mean wind speed (worst case)

Ef_{PM} = 0.0028 lb/ton

Ef_{PM10} = 0.0013 lb/ton

PM = 1.40 tons/yr

PM-10 = 0.14 tons/yr

Methodology:

Use the above equation to determine the emission factor (Ef).

Then, (Ef)*(142.5 tons/yr)*(8760 hr/yr)*(1 ton/2000 lbs)

The emission factor equation was taken from AP-42, Chapter 13.2.4.

Appendix A: Emission Calculations**Potential to Emit Calculations for Storage Piles****Company Name: Hoosier Hills Paving****Address City IN Zip: R.R. 4, Box 545, Bloomfield, Indiana 47424****CP: 055-15634****Plt ID: 055-00038****Reviewer: ERG/AB****Date: May 21, 2002****Uncontrolled Emissions in tons/year**

	PM	PM-10	SO2	NOx	VOC	CO	HAPs
Batch Mixer and Dryer	16819.2	2365.2	0.2	28.9	1.6	24.3	3.9
Heaters	0.12	0.12	3.79	1.07	0.04	0.63	negligible
Storage	0.010	0.004	-----	-----	-----	-----	-----
Conveying	1.4	0.14	-----	-----	-----	-----	-----
Paved Roads	0.74	0.15	-----	-----	-----	-----	-----
Total =	16821.5	2365.6	4.0	30.0	1.6	24.9	3.9

Controlled Emissions in tons/year

	PM	PM-10	SO2	Nox	VOC	CO	HAPs
Batch Mixer and Dryer	22.1	14.2	0.2	28.9	1.6	24.3	3.9
Heaters	0.12	0.12	3.79	1.07	0.04	0.63	negligible
Storage	0.010	0.004	-----	-----	-----	-----	-----
Conveying	1.4	0.1	-----	-----	-----	-----	-----
Paved Roads	0.74	0.15	-----	-----	-----	-----	-----
Total =	24.4	14.6	4.0	30.0	1.6	24.9	3.9